ASTRONOMY & ASTROPHYSICS

SUPPLEMENT SERIES

A EUROPEAN JOURNAL

VOLUME 22

OCTOBER 1975 – DECEMBER 1975

Astronomy & Astrophysics Supplement Series

A European Journal

Scientific organizations in Belgium, France, Germany, Greece, Italy, the Netherlands, the Scandinavian countries and Switzerland are combining their efforts in this enterprise with the administrative support of the European Southern Observatory (ESO). These scientific organizations have appointed the

Board of Directors

Chairman: A. Blaauw *(ESO)*

Y. Andrillat, *France*
L. Biermann, *Germany*
H. G. van Bueren, *The Netherlands*
G. Contopoulos, *Greece*
R. A. J. Coutrez, *Belgium*
H. C. van de Hulst, *The Netherlands*
R. Kippenhahn, *Germany*
J. Kovalevsky, *France*
G. Larsson-Leander, *Sweden*
W. Priester, *Germany*
A. Reiz, *Denmark*
L. Rosino, *Italy*
E. Schatzman, *France*
G. Setti, *Italy*
J. L. Steinberg, *France*
U. Steinlin, *Switzerland*
G. Traving, *Germany*

Editors-in-Chief 1973-1976

S. R. Pottasch
Kapteyn Astronomical Institute
P.O. Box 800
Groningen 8002, *The Netherlands*

H. H. Voigt
Universitäts-Sternwarte Göttingen
D-3400 Göttingen, *Germany*

J. Heidmann
Observatoire de Meudon
F-92190 Meudon, *France*

Managing Editor

B. Hauck
Institut d'Astronomie de
l'Université de Lausanne et
Observatoire de Genève
CH-1290 Sauverny, *Switzerland*

Board of Editors

K. Bahner, *Heidelberg*
J. E. Baldwin, *Cambridge*
B. Baschek, *Heidelberg*
W. Becker, *Basel*
E. J. Blum, *Meudon*
K. H. Böhm, *Seattle*
J. Borgman, *Roden*
E. M. Burbidge, *La Jolla*
O. J. Eggen, *Woden*
W. Fricke, *Heidelberg*
V. L. Ginzburg, *Moscow*
M. Hénon, *Nice*
J. T. Jefferies, *Honolulu*
F. D. Kahn, *Manchester*
F. J. Kerr, *Maryland*
H. van der Laan, *Leiden*
P. Ledoux, *Liège*
J. Lequeux, *Meudon*
P. O. Lindblad, *Saltsjöbaden*
L. Mestel, *Brighton*
P. G. Mezger, *Bonn*
B. Morando, *Paris*
F. Pacini, *Frascati*
B. E. J. Pagel, *Hailsham*
L. Plaut, *Groningen*
F. Praderie, *Paris*
M. S. Roberts, *Green Bank*
M. Schmidt, *Pasadena*
F. Spite, *Meudon*
A. B. Underhill, *Goddard Space Flight Center*
H. van Regemorter, *Meudon*
L. Woltjer, *Hamburg*
J. P. Zahn, *Nice*
Ya. B. Zeldovich, *Moscow*
C. Zwaan, *Utrecht*

Published by the Astronomical Institute Lausanne and Geneva Observatory, Switzerland, on behalf of the Board of Directors

Copyright © by the European Southern Observatory (ESO)

Printed by Imprimeries Réunies, Lausanne, Switzerland

CONTENTS

Voelcker
rared observations of the association Cyg OB 2 1

Celis S.
otoelectric photometry of late-type variable stars 9

W. Duerbeck
e eclipsing binary system VV Orionis 19

Soulié
sitions of the major planets and the Moon 49

Noël
lividual corrections Astrolabe-N30 for 449 southern stars 63

Chollet and S. Débarbat
sults obtained with the Paris Astrolabe 69

L. Simon and P. Bretagnon
sults of first order perturbations of the four large planets 107

H. McGruder, III
talogue of faint O-B5 stars in Centaurus ($\ell = 307°$, $b = 0°$) 161

E. Helt and K. Gyldenkerne
otoelectric multiband photometry of M giants and supergiants in the blue-visual spectral region 171

Alcaino
e Globular Cluster NGC 6809 193

Topaktas
GU photometry of a field to the direction to the galactic centre 207

W. Elst
photometric observations of AI Vel 221

Hauck and M. Mermilliod
$y\beta$ photoelectric photometric catalogue (magnetic tape) 235

Nicolet
talogue of measurements in the cape *UBV* photometry on magnetic tape 239

P. Broglia and P. Conconi
Beat phenomena in the dwarf cepheid AE UMa 2

S. Söderhjelm
Observations of six southern eclipsing binaries for apsidal motion 2

M. Azzopardi and J. Vigneau
List of 506 stars, probable Small Magellanic Cloud members 2

A. Heck and J. Manfroid
uvby photometry of some southern field stars 3

E. B. Holmberg, A. Lauberts, H.-E. Schuster and R. M. West
The ESO/Uppsala Survey of the ESO (B) Atlas of the Southern Sky. III 3